

The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

1. A circuit package for an electronic device, comprising:

a first circuit board positioned in a first plane;

a second circuit board positioned in a second plane;

at least one brace positioned between the first and second circuit boards, the brace formed to affix the first circuit board to the second circuit board, wherein the brace is operable to function as a flexible spacer between the first and second circuit boards;

at least two electrically conductive leads extending from at least one external surface of the circuit package; and

a housing formed between the first and second circuit boards, wherein the housing is formed to surround one side of the each circuit board, thereby allowing one surface of each circuit board to be exposed to the exterior surface of the circuit package.

2. The circuit package of Claim 1, wherein the housing forms a bottom surface between at least two electrically conductive leads of the circuit package, wherein the bottom surface of the circuit package comprises a cavity formed therein.

3. The circuit package of Claim 1, wherein the first and second circuit boards are made of a single-sided direct bonded copper substrate.

4. The circuit package of Claim 1, wherein the brace comprises:

an elongated body;

at least two arm portions positioned to extend from the body, wherein the arm portions are configured to affix the first circuit board to the second circuit board; and

at least two leg portions positioned to extend from the body, wherein the two leg portions are operable to function as a flexible spacer between the first and second circuit boards.

5. The circuit package of Claim 1, wherein the circuit package comprises a first brace and a second brace positioned between the first and second circuit boards, the first and second braces affix the first circuit board to the second circuit board, the first

and second braces are operable to function as a flexible spacer between the first and second circuit boards;

6. The circuit package of Claim 1, further comprising, a plurality of electrically conductive leads, wherein the plurality of electrically conductive leads are adapted for mounting the circuit package on an external surface, and wherein the plurality of electrically conductive leads are configured to support the circuit package in an upright position.

7. The circuit package of Claim 1, wherein an external surface of the housing forms a substantially flush surface with the exposed surfaces of each circuit board.

8. The circuit package of Claim 1, wherein the housing is made from an injected molded plastic.

9. The circuit package of Claim 1, further comprising an H-bridge circuit mounted on the first and second circuit boards.

10. The circuit package of Claim 7, wherein the H-bridge circuit comprises:  
a first switch in a first leg of the H-bridge output circuit coupled between a first lead and a first output node;

a second switch in a second leg of the H-bridge output circuit coupled between a second lead and a second output node;

a third switch in a third leg of the H-bridge output circuit coupled between the first lead and the second output node; and

a fourth switch in a fourth leg of the H-bridge output circuit coupled between the second lead and the first output node.

11. A circuit package for an electronic device, comprising:  
a first circuit board positioned in a first plane;  
a second circuit board positioned in a second plane, wherein the first and second circuit boards are positioned against one another;  
at least one brace operable to affix the first circuit board to the second circuit board;

a plurality of electrically conductive leads extending from at least one external surface of the circuit package, the plurality of electrically conductive leads adapted to mount the circuit package on an external surface in an upright position; and

a housing formed to surround at least a portion of the first and second circuit boards and a plurality of components mounted on the first and second circuit boards.

12. The circuit package of Claim 11, wherein the housing forms a surface between at least two electrically conductive leads of the circuit package, wherein the surface of the circuit package comprises a cavity formed therein.

13. The circuit package of Claim 11, wherein the first and second circuit boards are made of a single-sided direct bonded copper substrate.

14. The circuit package of Claim 11, wherein the brace is operable to function as a conductor between a plurality of circuit components on the first and second circuit boards.

15. The circuit package of Claim 11, wherein the housing is made from an injected molded plastic.

16. The circuit package of Claim 11, further comprising an H-bridge circuit mounted on the first and second circuit boards.

17. The circuit package of Claim 16, wherein the H-bridge circuit comprises:  
a first switch in a first leg of the H-bridge output circuit coupled between a first lead and a first output node;

a second switch in a second leg of the H-bridge output circuit coupled between a second lead and a second output node;

a third switch in a third leg of the H-bridge output circuit coupled between the first lead and the second output node; and

a fourth switch in a fourth leg of the H-bridge output circuit coupled between the second lead and the first output node.

18. A method for manufacturing a circuit package, wherein the method comprises:

positioning a first circuit board in a first plane;  
positioning a second circuit board in a second plane;  
affixing at least two brace members between the first and second circuit boards,  
thereby affixing the first circuit board to the second circuit board;  
mounting at least two electrically conductive leads to at least one edge of the first  
and second circuit boards; and  
forming a housing by injecting a molding material between the first and second  
circuit boards, thereby forming a top surface and a bottom surface that extend between  
the first and second circuit boards, wherein the housing is configured to expose at least  
one surface of the first and second circuit boards.

19. The method of Claim 18, further comprising the step of mounting a  
plurality of conductive leads to the first and second circuit boards.